

P.O. Box 64596 Saint Paul, Minnesota 55164 651.437. 0700

December 10, 2019

## Submitted Via Email to AQRoutineReport.PCA@state.mn.us

Air Quality Compliance Tracking Coordinator Air Quality Division Minnesota Pollution Control Agency 520 Lafayette Road St. Paul, MN 55155-4194

RE: 40 CFR 60 Subpart Kb Update, November 2019

To whom it may concern:

The attached tables provide updates on NSPS Kb tank inspections at the Flint Hills Resources Pine Bend Refinery in Rosemount, Minnesota to satisfy the notification requirements in 40 CFR § 60.113b(a)(5) and 40 CFR § 60.113b(b)(5) and CFR § 60.113b(b)(6)(ii).

Pursuant to 40 CFR § 60.115b(a)(3), the following tanks did not meet specifications for the annual internal floating roof tank seal inspection: **No IFR tanks failed to meet inspection criteria in the month of November.** 

Pursuant to 40 CFR § 60.115b(a)(4), the following tanks did not meet specifications for the internal floating roof tank seal inspection: No IFR tanks failed to meet inspection criteria in the month of November.

Pursuant to 40 CFR § 60.115b(b)(4), the following tanks did not meet specifications for the annual external floating roof tank seal inspections: 94B7A/B basins were inspected in the month of November. 94B7A/B both had secondary seal gaps exceeding Kb allowances. Work orders PB567454 and PB567452 were written for repairing the secondary seals of 94B7A/B by the respective 45-day Kb repair deadline.

Also included in this submittal is the 2020 Kb schedule.

If you have any questions regarding this letter, or if you would like to be present at any of the planned tank inspections, please contact me at (651) 438-5821.

Sincerely,

Robert Covey

Tanks Program Owner

Cc: Dan Dietrich, MPCA

Director; Air and Radiation Division, US EPA Region V

TANK	ROOF TYPE	ACTION	Past Date	SCHEDULED DATE	FOLLOW-UP FROM INSPECTION
			Completed	Scheduled	
094TK063	EFR	5 year primary inspection and seal gap measurement	3/14/2017	3/2022	
			Completed	Scheduled	
086TK001	EFR	5 year primary inspection and seal gap measurement	4/06/2017	4/2022	
00071/000	EED		Completed	Scheduled	
086TK002	EFR	5 year primary inspection and seal gap measurement	4/27/2015	4/2020 Scheduled	
086TK003	EFR	5 year primary increation and seel gap magaurement	Completed 4/26/2016	4/2021	
0001 K003	EFK	5 year primary inspection and seal gap measurement	Completed	Scheduled	
086TK004	EFR	5 year primary inspection and seal gap measurement	4/23/2018	4/2023	
000111001	2.11	b year primary inepedatori and edat gap ineadaroment	Completed	Scheduled	
086TK005	EFR	5 year primary inspection and seal gap measurement	4/12/2017	4/2022	
			Completed	Scheduled	
086TK006	EFR	5 year primary inspection and seal gap measurement	4/23/2018	4/2023	
			Completed	Scheduled	
086TK061	EFR	5 year primary inspection and seal gap measurement	4/25/2018	4/2023	
086TK066	EFR	Initial visual inspection and secondary seal gap	New seal	Scheduled	
		measurement.	installed during	12/2019	
			TA		
086TK066	EFR	Initial 5 year primary inspection and seal gap measurement	New seal	Scheduled	
			installed during	12/2019	
			TA		
			Completed	Scheduled	
086TK068	EFR	5 year primary inspection and seal gap measurement	10/2/2017	10/2022	
			Completed	Scheduled	
086TK080	EFR	5 year primary inspection and seal gap measurement	4/05/2017	4/2022	
00071/007	FED		Completed	Scheduled	
086TK087	EFR	5 year primary inspection and seal gap measurement	4/25/2018	4/2023	
086TK088	EFR	5 year primary inspection and seal gap measurement	Completed 4/23/2018	Scheduled 4/2023	
00011000	LIIX	3 year primary inspection and seargap measurement	Completed	Scheduled	
086TK151	EFR	5 year primary inspection and seal gap measurement	4/23/2018	4/2023	
00011(101	LIIX	b year primary inepedient and eour gap measurement	Completed	Scheduled	
086TK152	EFR	5 year primary inspection and seal gap measurement	4/13/2015	4/2020	
			Completed	Scheduled	
086TK160	EFR	5 year primary inspection and seal gap measurement	3/29/2017	3/2022	
			Completed	Scheduled	
049TK586	EFR	5 year primary inspection and seal gap measurement	8/7/2017	8/2022	
<b></b>			Completed	Scheduled	
049TK587	EFR	5 year primary inspection and seal gap measurement	7/31/2017	7/2022	
094TK064	EFR	5 year primary inspection and seal gap measurement	Completed 2/22/2018	Scheduled 2/2023	
55-11100 <del>-1</del>		o year primary inopositori and soai gap incasaroment	Completed	Scheduled	
94V49	EFR	5 year primary inspection and seal gap measurement	10/23/2018	10/2023	
		Annual visual inspection and secondary seal gap	Completed	Completed	Repair is required. See
094B-7A East	EFR	measurement	11/14/2018	11/14/2019	Attached Report.
094B-7A East	EFR	5 year primary inspection and seal gap measurement	Completed 11/9/2016	Scheduled 11/2021	
	_	Annual visual inspection and secondary seal gap	Completed	Completed	Repair is required. See
094B-7B West	EFR	measurement	11/14/2018	11/14/2019	Attached Report.
094B-7B West	EFR	5 year primary inspection and seal gap measurement	Completed 11/9/2016	Scheduled 11/2021	

# 2019 Current Kb-related Activity

# Flint Hills Resources Pine Bend Facility

Note: Notifications are reflected for Internal and External Floating Roofs.

TANK	ROOF TYPE	Date of 30-day notification	ANTICIPATED FILL DATE	
TK66	EFR	4/10/2019	Tank refilled on 12/10/2019	
TK26	IFR	4/10/2019	2/15/2020	
TK10	IFR	5/9/2019	3/15/2020	
TK14	IFR	5/9/2019	5/1/2020	
TK61	EFR	5/9/2019	9/15/2020	
TK62	EFR	5/9/2019	9/15/2020	
TK161	IFR	5/9/2019	9/15/2020	
TK85	IFR	5/9/2019	9/15/2020	
TK67	IFR	5/9/2019	10/15/2020	
TK25	IFR	5/9/2019	10/5/2020	

FHR is supplying this information to meet the refill notification obligations of 40 CFR § 60.113b. FHR will include tanks on this list as refill dates become known and will provide any necessary updates in subsequent monthly reports.

# PETROLEUM OR VOLATILE LIQUID STORAGE VESSEL EXTERNAL FLOATING ROOF SECONDARY SEAL GAP MAXIMUM WIDTH AND ACCUMULATED GAP AREA TEST RESULTS

# Subpart Kb: For Vessels With a Capacity Greater than 75 m<sup>3</sup> and Construction, Reconstruction or Modification after 7/23/84

FACILITY NAME	Flint Hills Re		TEST DATE	11/14/2019	
VESSEL NO.		94B-7A	INSPECTOR <u>Jordan</u>	<u> Henderson</u>	
VESSEL CAPACITY VESSEL CONSTRUC	CTION DATE	1/1/1976	PRIMARY SEAL TYPI	Ξ:	Liquid-Mounted Vapor-Mounted Metallic Shoe
8 0	-	П	METALLIC SHOE SEA		Yes No
7A-	East basin		into stored liquid	<b>✓</b>	Does Not Apply
7 6	] [	5	Other end extends a minimum of vertical di of 61 cm (24 in.) above		Yes No Does Not Apply
		SE	CONDARY SEAL		
	tallic Shoe or id-Mounted			Vapor- Mounte	
Accumulated Gap Area	_	Allowable	Accumulated Gap Area		Allowable
57.85217 cm <sup>2</sup> /m 2.73304 in <sup>2</sup> /ft	Fail	21.2 1	$\begin{array}{cc} & \text{NA} & \text{cm}^2/\text{m} \\ \hline & \text{NA} & \text{in}^2/\text{ft} \end{array}$		21.2 1
Maximum Gap Width	<u> </u>	Allowable	Maximum Gap Width		Allowable
1.5875 cm 0.625 in	Fail	1.27 0.5	NA cm		1.27 0.5
_	ed Number of ars or Opening			ed Number of ars or Openings	
Shoe Seal Fabric Seal Envelope	NA 0 0	Allowable 0 0 0 0 0	Shoe Seal Fabric Seal Envelope	NA NA NA	Allowable 0 0 0

### COMMENTS:

Basin covers operating as designed. The secondary seal gaps are outside allowable limits for maximum gap width and total accumulated. WO# PB567452 was written to have seal adjusted/repaired within 45 days. (Locations 1-2, 4-8) Due on or before 12-29-19

## SEAL GAP AREA FIELD DATA AND CALCULATION SUMMARY

# Subpart Kb: For Vessels With a Capacity Greater than 75 m<sup>3</sup> and Construction Reconstruction or Modification after 7/23/84

Constructio	n, Reconstructior	or Modification a	fter 7/23/84

Relative	- NO. - DIAMETER Diameter erimeter / 3.141	94B-7A 48.52179214 m 159.2 ft	DATE INSPECTOR	SEAL:	11/14/2019 Jordan Hend Primary  Secondary	erson
Gap No	. Gap	Width	Gap Circu	ımferential	Total	Gap
'	>1/8 in. dia.	>0.32 cm dia		ngth	Surface	
	(in.)	(cm)	(in.)	(cm)	(in <sup>2</sup> )	(cm <sup>2</sup> )
1	0.375	0.9525	48	121.92	`´18	116.1288
2	0.5	1.27	36	91.44	18	116.1288
3	0.13	0.3302	70	177.8	9.1	58.70956
4	0.625	1.5875	48	121.92	30	193.548
5	0.625	1.5875	48	121.92	30	193.548
6	0.625	1.5875	336	853.44	210	1354.836
7	0.625	1.5875	144	365.76	90	580.644
8	0.625	1.5875	48	121.92	30	193.548
9	0	0	0	0	0	0
10	0	0	0	0	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0
13	0	0	0	0	0	0
14	0	0	0	0	0	0
15	0	0	0	0	0	0
16	0	0	0	0	0	0
17	0	0	0	0	0	0
18	0	0	0	0	0	0
19	0	0	0	0	0	0
20	0	0	0	0	0	0
21	0	0	0	0	0	0
22	0	0	0	0	0	0
23	0	0	0	0	0	0
24	0	0	0	0	0	0
25	0	0	0	0	0	0
26	0	0	0	0	0	0
27	0	0	0	0	0	0
28	0	0	0	0	0	0
29	0	0	0	0	0	0
30	0	0	0	0	0	0
					435.1	2807.091 TOTAL
			Maxima	\\/idth	1.5875	cm
			Maximum Gap	vviatn =	0.625	in
Accumu	ılated Gap Are	a Per Meter of Tan	nk Diameter:			
	Total A	ccumulated Gap Ar meter of the Vesse	ea, cm <sup>2</sup>	=	57.852174	cm <sup>2</sup> /m
	Dia	meter of the Vesse	I, m			
Accumu	ılated Gap Are	a Per Foot of Tank	c Diameter:			
	Total A	ccumulated Gan A	rea. in <sup>2</sup>	:	= 2.7330402	in <sup>2</sup> /ft
	Dia	accumulated Gap A meter of the Vesse	el, ft			
Inspecto	or signature:	Jordan Henderso	on			
	Report Date:	11/14/2019				

# PETROLEUM OR VOLATILE LIQUID STORAGE VESSEL EXTERNAL FLOATING ROOF SECONDARY SEAL GAP MAXIMUM WIDTH AND ACCUMULATED GAP AREA TEST RESULTS

# Subpart Kb: For Vessels With a Capacity Greater than 75 m<sup>3</sup> and Construction, Reconstruction or Modification after 7/23/84

FACILITY NAME FII	nt Hills Resources		TEST DATE <u>11/14/2019</u>	
VESSEL NO.	94B-7B		INSPECTOR Jordan Henderson	
VESSEL CAPACITY				
VESSEL CONSTRUCTION	ON DATE <u>1/1/1976</u>		PRIMARY SEAL TYPE:	✓ Liquid-Mounted
North				☐ Vapor-Mounted
<b>→</b>				
			METALLIC SHOE SEAL:	_
				Yes
- 7D W-	Abada		One end is submerged	No
5 <b>7B- We</b> s	st basin		into stored liquid	✓ Does Not Apply
	_	1	Other end extends a	Yes
3		- 4	minimum of vertical distance	□ No
		2	of 61 cm (24 in.) above liquid	✓ Does Not Apply
		_		
		CON	DARY SEAL	
Metallic	Shoe			]
Ol	I			apor-
L Liquid-M	ounted ]		IMC	ounted
Accumulated			Accumulated	
Gap Area	Allowable		Gap Area	Allowable
<u> </u>			<u> </u>	
12.22062 cm <sup>2</sup> /m	21.2		NA cm <sup>2</sup> /m	21.2
0.577324 in <sup>2</sup> /ft <b>Pa</b>	ss 1		NA in <sup>2</sup> /ft	1
Maximum Gap Width	Allowable		Maximum Gap Width	Allowable
4.5075	4.07		NIA ave	4.07
1.5875 cm 0.625 in <b>Fa</b>	1.27		NA cm	1.27
<u>0.625</u> in <b>Fa</b>	il 0.5		NA in	0.5
Observed	Number of		Observed Number	of
Holes, Tears			Holes, Tears or Open	
	Allowable			Allowable
Shoe	NA 0		Shoe NA	0
Seal Fabric	0 0		Seal Fabric NA	
Seal Envelope	0 0		Seal Envelope NA	0
COMMENTO.				
COMMENTS:	a designed The seconds		al mana ana antaida allannalala linak	
		•	al gaps are outside allowable limit within 45 days. (Locations 2) Due	<b>.</b>
WW One DOO! 404Was Wille	i to nave seal aujusteu/lep	an <del>c</del> u	within 40 days. (Locations 2) Due	OIT OF DEIDIE 12-23-13.

### SEAL GAP AREA FIELD DATA AND CALCULATION SUMMARY

# Subpart Kb: For Vessels With a Capacity Greater than 75 $\mathrm{m}^3$ and

### Construction, Reconstruction or Modification after 7/23/84

Relative	NO. DIAMETER Diameter rimeter / 3.141	94B-7B 48.52179214 m 159.2 ft 6 = 159.2	DATE INSPECTOR	11/14/2019 Jordan Henderso SEAL:	n Primary <b>Secondary</b>	
Gap No.	Gap	Width	Gap Circ	umferential	Total	Gap
	>1/8 in. dia.	>0.32 cm dia	Le	ngth	Surface	e Area
	(in.)	(cm)	(in.)	(cm)	(in <sup>2</sup> )	(cm <sup>2</sup> )
1	0.13	0.3302	48	121.92	6.24	40.25798
2	0.625	1.5875	110	279.4	68.75	443.5475
3	0.13	0.3302	24	60.96	3.12	20.12899
4	0.25	0.635	24	60.96	6	38.7096
5	0.13	0.3302	60	152.4	7.8	50.32248
6	0	0	0	0	0	0
7	0	0	0	0	0	0
8	0	0	0	0	0	0
9 10	0	0	0	0	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0
13	0	0	0	0	0	0
14	0	0	0	0	0	0
15	0	0	0	0	0	0
16	0	0	0	0	0	0
17	0	0	0	0	0	0
18	0	0	0	0	0	0
19	0	0	0	0	0	0
20	0	0	0	0	0	0
21	0	0	0	0	0	0
22	0	0	0	0	0	0
23	0	0	0	0	0	0
24	0	0	0	0	0	0
25	0	0	0	0	0	0
26	0	0	0	0	0	0
27	0	0	0	0	0	0
28	0	0	0	0	0	0
29	0	0	0	0	0	0
30 31	0	0	0	0		0
31						
					91.91	592.9666 TOTAL
					1.5875	cm
			Maximum Gap	width =	0.625	in
Accumu	lated Gap Are	a Per Meter of Tan	-	, widii	0.020	
7.000	=	ccumulated Gap Ar		=	12.22062	cm <sup>2</sup> /m
	IOIAI A	meter of the Vesse	l m	_	12.22002	CIII /III
<b>A</b>						
Accumu	-	a Per Foot of Tank				
		Accumulated Gap A		=	0.577324	in <sup>2</sup> /ft
	Dia	meter of the Vesse	l, ft			
Inspecto	r signature:	Jordan Henderso	n			
	Report Date:	11/14/2019				

TANK	ROOF TYPE	ACTION	Past Date	SCHEDULED DATE	FOLLOW-UP FROM INSPECTION
			Completed	Scheduled	
088TK523	IFR	Annual visual inspection	2/28/2019	2/2020	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
094B-7A East	EFR	measurement	2/27/2019	2/2020	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
094B-7B West	EFR	measurement	2/27/2019	2/2020	
			Completed	Scheduled	
086TK011	IFR	Annual visual inspection	3/14/2019	3/2020	
00071/040	IED	Annual street in an action	Completed	Scheduled	
086TK012	IFR	Annual visual inspection	3/19/2019 Completed	3/2020 Scheduled	
086TK014	IFR	Annual visual inspection	3/11/2019	3/2020	
00011014	11 13	Airiudi visuai irispection	Completed	Scheduled	
086TK016	IFR	Annual visual inspection	3/11/2019	3/2020	
		'	Completed	Scheduled	
086TK023	IFR	Annual visual inspection	3/11/2019	3/2020	
			Completed	Scheduled	
086TK028	IFR	Annual visual inspection	3/19/2019	3/2020	
			Completed	Scheduled	
086TK048	IFR	Annual visual inspection	3/19/2019	3/2020	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
094TK063	EFR	measurement	3/19/2019	3/2020	
			Completed	Scheduled	
094TK063	EFR	5 year primary inspection and seal gap measurement	3/14/2017	3/2022	
			Completed	Scheduled	
086TK161	IFR	Annual visual inspection	3/19/2019	3/2020	
094TK205	IFR	Annual visual inspection	Completed 3/19/2019	Scheduled 3/2020	
0941K205	IFK	Annual visual inspection	Completed	Scheduled	
094TK206	IFR	Annual visual inspection	3/19/2019	3/2020	
001111200		, amaan noquan mepeeden	Completed	Scheduled	
088TK522	IFR	Annual visual inspection	3/19/2019	3/2020	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK001	EFR	measurement	4/9/2019	4/2020	
			Completed	Scheduled	
086TK001	EFR	5 year primary inspection and seal gap measurement	4/06/2017	4/2022	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK002	EFR	measurement	4/10/2019	4/2020	
			Completed	Scheduled	
086TK002	EFR	5 year primary inspection and seal gap measurement	4/27/2015	4/2020	
00071/000	EED	Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK003	EFR	measurement	4/9/2019 Completed	4/2020 Scheduled	
086TK003	EFR	5 year primary inspection and seal gap measurement	4/26/2016	4/2021	
00011000	LIIV	Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK004	EFR	measurement	4/9/2019	4/2020	
			Completed	Scheduled	
086TK004	EFR	5 year primary inspection and seal gap measurement	4/23/2018	4/2023	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK005	EFR	measurement	4/10/2019	4/2020	
			Completed	Scheduled	
086TK005	EFR	5 year primary inspection and seal gap measurement	4/12/2017	4/2022	
00671/000	EED	Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK006	EFR	measurement	4/10/2019 Completed	4/2020 Schodulad	
086TK006	EFR	5 year primary inspection and seal gap measurement	Completed 4/23/2018	Scheduled 4/2023	
00011000	LFIX	Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK007	EFR	measurement	4/10/2019	4/2020	
55011001	L: 1\		Completed	Scheduled	
086TK007	EFR	5 year primary inspection and seal gap measurement	4/10/2019	4/2024	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK061	EFR	measurement	4/9/2019	4/2020	
			Completed	Scheduled	<del></del>
086TK061	EFR	5 year primary inspection and seal gap measurement	4/25/2018	4/2023	

TANK	ROOF TYPE	ACTION	Past Date	SCHEDULED DATE	FOLLOW-UP FROM INSPECTION
086TK062	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/9/2019	Scheduled 4/2020	
			Completed	Scheduled	
086TK062	EFR	5 year primary inspection and seal gap measurement	4/9/2019	4/2024	
086TK066	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/10/2019	Scheduled 4/2020	
086TK066	EFR	Initial visual inspection and secondary seal gap	New seal	Scheduled	
000111000	LITA	measurement.	installed during	12/2019	
086TK066	EFR	Initial 5 year primary inspection and seal gap measurement	New seal installed during TA	Scheduled 12/2019	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK068	EFR	measurement	4/10/2019	4/2020	
			Completed	Scheduled	
086TK068	EFR	5 year primary inspection and seal gap measurement	10/2/2017	10/2022	
086TK080	EFR	Annual visual inspection and secondary seal gap	Completed 4/8/2019	Scheduled 4/2020	
00011000	EFK	measurement	4/6/2019	4/2020	
			Completed	Scheduled	
086TK080	EFR	5 year primary inspection and seal gap measurement	4/05/2017	4/2022	
086TK083	EFR	Annual visual inspection and secondary seal gap measurement	Completed 4/2/2019	Scheduled 4/2020	
00011003	LIIV	measurement	Completed	Scheduled	
086TK083	EFR	5 year primary inspection and seal gap measurement	4/2/2019	4/2024	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK087	EFR	measurement	4/9/2019	4/2020	
086TK087	EFR	5 year primary inspection and seal gap measurement	Completed 4/25/2018	Scheduled 4/2023	
00671/000	EFR	Annual visual inspection and secondary seal gap	Completed 4/8/2019	Scheduled 4/2020	
086TK088	EFR	measurement	Completed	Scheduled	
086TK088	EFR	5 year primary inspection and seal gap measurement	4/23/2018	4/2023	
000714450		Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK150	EFR	measurement	4/8/2019 Completed	4/2020 Scheduled	
086TK150	EFR	5 year primary inspection and seal gap measurement	4/8/2019	4/2024	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK151	EFR	measurement	4/8/2019	4/2020	
086TK151	EFR	5 year primary inspection and seal gap measurement	Completed 4/23/2018	Scheduled 4/2023	
0001K131	EFK	Annual visual inspection and secondary seal gap	Completed	Scheduled	
086TK152	EFR	measurement	4/8/2019	4/2020	
00071/450			Completed	Scheduled	
086TK152	EFR	5 year primary inspection and seal gap measurement  Annual visual inspection and secondary seal gap	4/13/2015 Completed	4/2020 Scheduled	
086TK160	EFR	measurement	4/8/2019	4/2020	
086TK160	EFR	5 year primary inspection and seal gap measurement	Completed 3/29/2017	Scheduled	
0017100	EFK	o year primary inspection and seargap measurement	312812011	3/2022	
049TK586	EFR	Annual visual inspection and secondary seal gap measurement	Completed 8/13/2019	Scheduled 8/2020	
049TK586	EFR	5 year primary inspection and seal gap measurement	Completed 8/7/2017	Scheduled 8/2022	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
049TK587	EFR	measurement	7/23/2019	7/2020	
049TK587	EFR	5 year primary inspection and seal gap measurement	Completed 7/31/2017	Scheduled 7/2022	
5 10 11007	LIIV				
094B-7A East	EFR	Annual visual inspection and secondary seal gap measurement	Completed 5/29/2019	Scheduled 5/2020	
		Annual visual inspection and secondary seal gap	Completed	Scheduled	
094B-7B West	EFR	measurement	5/29/2019	5/2020	

ROOF TYPE	ACTION	Past Date	SCHEDULED DATE	FOLLOW-UP FROM INSPECTION
IFR	Annual visual inspection	Completed 6/5/2019	Scheduled 6/2020	
IFR	Annual visual inspection	Completed 6/5/2019	Scheduled 6/2020	
IED	Annual visual inspection	Completed	Scheduled	
II IX	Allitual visual irispection	Completed	Scheduled	
IFR	Annual visual inspection	6/5/2019	6/2020	
IFR	Annual visual inspection	Completed 7/9/2019	Scheduled 7/2020	
FFR	, , , , , ,			
		Completed	Scheduled	
IED		Completed	Scheduled	
IFR	Annual visual inspection	6/6/2019	6/2020	
IFR	Annual visual inspection	Completed 7/9/2019	Scheduled 7/2020	
IFR	Annual visual inspection	6/26/2019	Scheduled 6/2020	
IED	·	Completed	Scheduled	
	·	Completed	Scheduled	
IFR	Annual visual inspection	Completed	7/2020 Scheduled	
IFR	Annual visual inspection	7/15/2019	7/2020 Scheduled	
IFR	Annual visual inspection	7/9/2019	7/2020	
IFR	Annual visual inspection	Completed 7/9/2019	Scheduled 7/2020	
IFR	Annual visual inspection	Completed 7/30/2019	Scheduled 7/2020	
		Completed	Scheduled	
	·	Completed	Scheduled	
	Annual visual inspection and secondary seal gap	Completed	Scheduled	
	Annual visual inspection and secondary seal gap	Completed	Scheduled	
LFR				
EFR	Annual visual inspection and secondary seal gap measurement	7/22/2019	7/2020	
EFR	5 year primary inspection and seal gap measurement	Completed 10/23/2018	Scheduled 10/2023	
	Annual visual inspection and secondary seal gap measurement	Completed 11/14/2019	Scheduled 11/2020	
		Completed	Scheduled	
	Annual visual inspection and secondary seal gap	Completed	Scheduled	
EFR	5 year primary inspection and seal gap measurement	11/14/2019 Completed 11/9/2016	11/2020 Scheduled 11/2021	
	IFR IFR IFR EFR EFR IFR IFR IFR IFR IFR IFR IFR EFR EFR EFR EFR EFR EFR EFR EFR EFR	IFR Annual visual inspection  IFR Annual visual inspection and secondary seal gap measurement  EFR S year primary inspection and seal gap measurement  IFR Annual visual inspection  IFR Annual visual inspection and secondary seal gap measurement  Annual visual inspection and seal gap measurement Annual visual inspection and secondary seal gap measurement  EFR S year primary inspection and seal gap measurement Annual visual inspection and secondary seal gap measurement  EFR S year primary inspection and seal gap measurement Annual visual inspection and secondary seal gap measurement	IFR Annual visual inspection 6/5/2019  IFR Annual visual inspection 7/9/2019  IFR Annual visual inspection and secondary seal gap Completed 6/6/2019  EFR Measurement Completed 2/21/2019  IFR Annual visual inspection and seal gap measurement Completed 6/6/2019  IFR Annual visual inspection Completed 6/6/2019  IFR Annual visual inspection Completed 7/9/2019  IFR Annual visual inspection Completed 6/6/2019  IFR Annual visual inspection Completed 7/9/2019  IFR Annual visual inspection Completed 7/15/2019  IFR Annual visual inspection 7/9/2019  IFR Annual visual inspection Completed 7/9/2019  IFR Annual visual inspection 7/9/2019  IFR Annual visual inspection Completed 7/9/2019  IFR Annual visual inspection 7/9/2019  IFR Annual visual inspection Completed 7/9/2019  IFR Annual visual inspection 7/9/2019  Annual visual inspection 7	IFR Annual visual inspection